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10/588,426	05/09/2007	Ulrich Pfahler	GOTZF 160	8709
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EXAMINER SWIFT, CHARLES M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/588,426

Applicant(s)

PFAHLER, ULRICH

Examiner

CHARLES SWIFT

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 09 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-859)
Paper No(s)/Mail Date 7/3/2007, 7/3/2007, 8/4/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This is the initial Office Action based on the application filed on 06/02/2006
2. Claims 1 - 24 are pending.

Priority

3. Priority to PCT application (PCT/EP05/50309) is claimed which also claims priority to EPO application 04100477. (Earliest Effective Filing Date: 02/09/2004).

Claim Objections

4. Claims 1 – 24 are objected to because of the following informalities:

Claims 1 – 24 employs claimed reference characters (a, b, c, d) which are confusing. Applicants are advised to remove the claimed reference characters from the claims. Appropriate correction is required.

Claim 1 employs the term "computer node (c) is connected by the hierarchically subordinate driver server module" (Claim 1, line 10 - 12), there is lack of antecedent base to the claim limitation, is the subordinate driver server module is coupled as a slave device to the computer node (c) or is it to computer node (a)? Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1 - 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claim 1 – 24, they are directed to an arrangement for distributing data. However, an arrangement is not one of the statutory subject matter under 35 USC 101(Process, Machine, Manufacture and Composition of Matter). Appropriate correction is needed.

As per claim 19, it is directed to an arrangement for distributing data and further claims: "further embodied in electrical carrier signal, so as to be downloadable". Claims that recite nothing but physical characteristics of a form of energy, such as frequency, voltage, or the strength of a magnetic field, defined energy or magnetism *per se*, and as such are non-statutory phenomena. *O'Reilly c. Morse*, 56 U.S. (15 How.) 62, 112-114 (1853). Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101. Applicants are advised to remove this limitation completely to overcome this deficiency.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 – 6, 8 – 20 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 6125372).

As per claim 1,

White discloses:

- An arrangement for distributing data for device drivers, in particular printer drivers, in a computer network (White col 4, line 18, "A distributed processing application program is any suite of executable computer program files and data files designed to cooperate to perform a function across a network... As a case in point, printer suppliers may develop and provide drivers for operation on resource server 122 for each model of printer,"),
- Which has three or more connected computers as nodes (a, b, c, d) of which at least one is connected as a so-called peripheral server computer (b) to one or more peripheral devices, for their administration and activation (White col 1, line 62, "Accordingly, a computer system in one embodiment of the present invention includes a workstation, a resource, and a server. The resource is in data communication with the

workstation and with the server. The server performs a method including the steps in any order of (a) receiving from the workstation an indication for continuing performance of the method; (b) communicating with the resource to receive an identification of the resource; (c) accessing from the resource a file version indicator in response to the identification; and (d) storing a replacement file from the server onto the resource, wherein after storing, the resource operates in response to the replacement file."),

- Characterized in that at least two (a, c) of the computers are each provided with a driver server module (White figure 1, file server 110 and 142 and resource server 122, figure 3, file server 330. Note file server 110 and 142 is the node a and c here and resource server 122 is the nodes that is connected to the peripheral devices),
- Which is formed for receiving driver data or information for printer or other device drivers and for their administration and transfer to other computers (b, d), and are in communication with at least two driver server modules of different computer nodes (a, c) and are thus dominantly coupled hierarchically with one another according to the master/slave principle (White figure 3, note administrator 334 and actor nodes 336 and 364.),

- And the computer node (c) is connected by the hierarchically subordinate driver server module to the at least one peripheral server computer (b) for transferring the driver data to the latter (White figure 1, note that file server 110 is connected to the resource through network 112).

As per claim 2,

Note that White further discloses:

- An arrangement according to claim 1, characterized in that the driver server modules of one or both computers (a, c) are formed for receiving individual configuration data files or data sets for setting a printer or other device driver, and for administrating and transferring these configuration data files or data sets to other computers (b). (White figure 3, configuration 340, and figure 1, network 116.)

As per claim 3,

Note that White further discloses:

- An arrangement according to claim 2, characterized in that the peripheral server computer (b) or at least one computer (a, c) is provided with a driver server module having one or more modules for automatically installing one device driver

each. (White col 2, line 7, "According to a first aspect of such an embodiment, the replacement file is installed on the resource without manual operations at the server.")

As per claim 4,

Note that White further discloses:

- An arrangement according to claim 2, characterized in that the peripheral server computer (b) is arranged by programming to request as a client from the driver server module communicating therewith, data for device drivers or configurations automatically or by user input or to receive the same upon update initialization of a driver server module. (White col 6, line 54, "In other words if a designated file does not exist on file system 124, then that file is identified as to be obtained and to be copied (i.e., installed).")

As per claim 5,

Note that White further discloses:

- An arrangement according to claim 4, characterized in that a driver server module which is superordinate to another is coupled to a memory of a

predetermined quantity of different device driver and/or device configuration data and is set up to transfer to the subordinate driver server module only part of the stored device driver data and/or configuration data. (White figure 3, files 340, which consists of printer driver A and B.)

As per claim 6,

Note that White further discloses:

- An arrangement according to claim 2, characterized by a computer node (d) provided with a graphic user interface (GUI) for the central administration of the hierarchical transfer and distribution of the device driver data and device configuration data between the computer nodes (a, b, c, d) including the peripheral server computer (b) or between the driver server modules and the installation modules on the peripheral server computers (b). (White col 2, line 66, "For example, local client 114 includes a conventional workstation having a conventional operating system, browser, and word processor. The operating system, for example, is of the type known as Windows NT marketed by Microsoft which supports network link 116. The browser, for example, is of the type known as Navigator marketed by Netscape.")

As per claim 8,

Note that White further discloses:

- An arrangement according to claim 2, characterized by a tree-like structure of the computer nodes (a, b, c), the uppermost node or root node (a) being provided with a master driver server module, which dominates all further slave driver server modules connected thereto of downstream computer nodes (c) in the master/slave hierarchy in order to transfer data for device drivers and configurations of the computer network thereto. (White figure 3, administrator 334, and col 6, line 42, "In a variation of the present invention, administrator 334 further accesses file system 144 through remote file server 142 to confirm designations and to obtain files not currently present on file system 112. Access to file system 144 is accomplished through web manager 332, designating the URL of remote file server 142. In a further variation of the present invention, files designated to be used by printer 390 (including font and form files, and components of Personality 394) are confirmed and obtained as needed." Note in this variation, the remote server 144 holds the master copy of the data and can downloaded or downstream to local file server 110 for use.)

As per claim 9,

Note that White further discloses:

- An arrangement according to claim 8, characterized in that the master driver server module (a) and the slave driver server module (c) are each provided with a memory region (DB) for inventorying and sending data for all device drivers and configurations of the computer network. (White figure 3, files 340, which consists of printer driver A and B. further note that the same memory is available to both local file server 110 and remote file server 142.)

As per claim 10,

Note that White further discloses:

- An arrangement according to claim 8, characterized in that the peripheral server computers (b) form the lowest level or the lowest or end nodes of the tree-like structure. (White figure 3, printer server 360.)

As per claim 11,

Note that White further discloses:

- An arrangement according to claim 8, characterized by a plurality of driver server modules of the same order in the hierarchy or computer nodes (c) provided therewith, with which one or more peripheral server computers (b) communicate in order to receive device driver data or device configuration data. (White figure 3, note that printer server 360 is communicating with file server 330 to receive driver data)

As per claim 12,

Note that White further discloses:

- An arrangement according to claim 8, characterized in that a subordinate slave driver server module or a computer node (c) provided therewith is provided with data for device drivers and device configurations of the computer network, which are different from those of the superordinate master server driver module or of the computer node (a) provided therewith. (White figure 3, administrator 334, and col 6, line 42, "In a variation of the present invention, administrator 334 further accesses file system 144 through remote file server 142 to confirm designations and to obtain files not currently present on file system 112. Access to file system 144 is accomplished through web

manager 332, designating the URL of remote file server 142.

In a further variation of the present invention, files designated to be used by printer 390 (including font and form files, and components of Personality 394) are confirmed and obtained as needed." Note in this variation, the remote server 144 holds the set of data that is not contained on the local file server 110 but can downloaded or downstream to local file server 110 for use.)

As per claim 13,

Note that White further discloses:

- An arrangement according to claim 8, characterized in that at least one of the computer nodes (a, c) having a respective driver server module is provided itself with one or more modules for installation of a respective device driver. (White col 4, line 65, "A method of resource administration of the present invention provides upgraded system operation by installing replacement files on a server.")

As per claim 14,

Note that White further discloses:

- An arrangement according to claim 8, the arrangement including a computer node (a, c) with a driver server module, having a local, non-volatile permanent memory (DB), characterized by saving of the device driver data and optionally of the individual configuration data files for printer or other device drivers entirely or in part in the permanent memory (DB), and by a driver grouping or assembly data file further saved therein having data representing the information about a directory of device drivers or device individual configurations kept available, about memory locations for the driver data or individual configuration data files, about allocations of the device drivers to peripheral server computers (b) or other peripheral components or about names or addresses of hierarchically subordinate driver server modules or computer nodes (c) or peripheral server computers (b) provided therewith. (White figure 1, memory storage 112, 124 and 144, and col 4, line 11m "File system 124, 112, and 144 each include any memory device capable of data storage and retrieval. For example, each file system includes a conventional disk drive with a conventional directory structure of named files. Each file in the directory is associated with a size and a date last modified. The file name, the size, the date, or any combination is used to indicate the version of the file.")

As per claim 15,

Note that White further discloses:

- An arrangement according to claim 14, wherein the computer node is characterized in that in its permanent memory a database (DB) is applied, in which driver or configuration data of different printer or other different device drivers are saved. (White figure 3, database 340.)

As per claim 16,

Note that White further discloses:

- An arrangement according to claim 14 wherein the computer node is, characterized in that thereon the stored device driver data or device configuration data are at least partially not installed or not capable of running. (White figure 3, database 340. Note that Printer driver A is not usable by Operating System B)

As per claim 17,

Note that White further discloses:

- An arrangement according to claim 14 wherein the computer node is characterized in that at least part of the device drivers stored on the computer node (a, c) and administrated by the driver server module thereon is not

compatible with the operating system of the computer node (a, c). (White figure 3, database 340. Note that Printer driver A is not usable by Operating System B)

As per claim 18,

Note that White further discloses:

- An arrangement according to claim 5 and further comprising a computer program for realizing the driver server module on a computer node (a, c), characterized by program code elements for carrying out the said functions of the driver server module. (White col 3, line 66, "A file system is any conventional mechanism for automatically storing and providing automatic access to information in machine readable form.")

As per claim 19,

Note that White further discloses:

- An arrangement according to claim 18 wherein the program code elements are loaded in a computer memory, stored on a computer-readable data carrier, or are contained in an electrical carrier signal so as to be downloadable. (White col 3, line 66, "A file system is any conventional mechanism for automatically storing and providing automatic access to

information in machine readable form." Further note that data stored in electrical signal is not a patentable subject matter hence not given patentable weight.)

As per claim 20,

Note that White further discloses:

- An arrangement according to claim 1, wherein the peripheral server computer (b), has one or more modules for automatic installation of a respective device driver, characterized in that the at least one driver installation module is coupled to a memory region for a grouping and assembly data file, whose data represent information at least about a driver server module allocated to or superordinate to the driver installation module. (White figure 3, and col 7, line 33, "At the completion of method 200, the distributed processing application program responsible for printing a document from word processor 314 on printer 390 has been upgraded. An example of upgraded operation proceeds in several steps as follows. Data to be printed is identified as directed at queue 372 by word processor 314. Operating system 318 verifies that print driver A 316 at client 310 matches print driver A 370 at print server 360, and if not updates print driver A 316 at client 310. After passing through

print driver A 316, operating systems 318 and 362 cooperate to route the data through print driver B 368, queue 372, and port monitor 366. Port monitor 366 passes the data via a known printer interface protocol to printer 390.")

As per claim 24,

Note that White further discloses:

- An arrangement according to claim 6 and further comprising a graphical user interface (GUI) (White col 2, line 66, "For example, local client 114 includes a conventional workstation having a conventional operating system, browser, and word processor. The operating system, for example, is of the type known as Windows NT marketed by Microsoft which supports network link 116. The browser, for example, is of the type known as Navigator marketed by Netscape." Note, browsers such as Netscape or Internet Explorer is a type of GUI.), characterized by the driver server modules or the computer nodes (a, c) provided therewith and read and write interfaces allocated to the peripheral server computers (b) for carrying out functions of administration of plural driver server modules, in that these interfaces are formed for access to memory regions (DB) which act as sources or sinks for data of the device drivers or configurations for the driver server modules or the computer

nodes (a, c) provided. (White col 4, line 65, "A method of resource administration of the present invention provides upgraded system operation by installing replacement files on a server. For example, method 200 of FIG. 2 is implemented in one embodiment according to a distributed processing application program 300 of the data flow diagram of FIG. 3. Method 200 operates on system 100 wherein an operator using a browser program on local client 114 initiates an upgrade to resource 120 for improved cooperation between a word processor program on local client 114 and an electrophotographic printer. In this example, resource 120 includes a print server 360 and a printer 390 which exemplify resource server 122 (with file system 124) and peripheral 126, described more generally with reference to FIG. 1.")

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, in view of Fukuda (US 5896394)

As per claim 7,

White discloses the arrangement according to claim 2,

White did not expressly disclose:

- Characterized by an auto-repair module, which is in communication with the peripheral server computer(s) (b) and at least one of the driver server computer nodes (a, c), which is set up and formed for fault recognition and elimination thereof by repeated transmission of driver data or individual configuration data files for printers or other devices.

However, Fukuda teaches:

- Characterized by an auto-repair module, which is in communication with the peripheral server computer(s) (b) and at least one of the driver server computer nodes (a, c), which is set up and formed for fault recognition and elimination thereof by repeated transmission of driver data or individual configuration data files for printers or other devices. (Fukuda col 1, line 18, "According to the error control method based on the automatic repeat request system, if a data frame transmitted from a transmission

side to a reception side contains an error, the data frame is again transmitted from the transmission side to the reception side on the basis of the repeat request issued from the reception side to the transmission side.")

It would have been obvious for one of ordinary skill in the art at the time of invention to incorporate the teaching of Fukuda into that of White in order to have nodes formed for fault recognition by transmit the data repeatedly. This is method is commonly used in the error control in communication called automatic repeat request as demonstrated by the background of Fukuda reference, repeatedly transmit the data to the intended target would ensure the right data get transmitted to the said target. The applicants have only combined commonly known techniques in the field to achieve predictable results.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, in view of Sutoh et al (US 7383264, hereinafter Sutoh).

As per claim 21,

White discloses the arrangement according to claim 20,

White did not expressly disclose:

- Characterized in that the assembly data file contains information about time intervals within which received or allocated device drivers are to be updated.

However, Sutoh teaches:

- Characterized in that the assembly data file contains information about time intervals within which received or allocated device drivers are to be updated. (Sutoh col 16, , line 21, "Receiving the request, the control software program 76 updates the data on the disk drive 16 at step 709. These steps are repeated at regular time intervals to update the data based on logs, copying the data in the primary system to the secondary system.")

It would have been obvious for one of ordinary skill in the art at the time of invention to incorporate the teaching of Sutoh into that of White in order to have drivers to be updated on set time intervals. This is method is commonly used in the software updating to control the update time so computing power can be used for other more important processes during business time and save the update at off hours to cause as little productivity interruption as possible as demonstrated by Sutoh reference, The applicants have only combined commonly known techniques in the field to achieve predictable results.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over White modified by Sutoh as applied to claim 21 above, further in view of Morrison et al (US 7149887, hereinafter Morrison)

As per claim 22,

White modified by Sutoh teaches the arrangement according to claim 21 above,

White modified by Sutoh did not expressly teach:

- Characterized in that the driver installation module is formed with a functionality for monitoring device driver installations for accuracy.

However, Morrison teaches:

- Characterized in that the driver installation module is formed with a functionality for monitoring device driver installations for accuracy. (Morrison col 7, line 61, "By installing marker files (211 and 315), as in Step 411, OEMs (229 and 311) can monitor the quality of individual drivers and the stability of particular PC models,")

It would have been obvious for one of ordinary skill in the art at the time of invention to incorporate the teaching of Morrison into that of White modified by Sutoh in order to monitor driver installations for accuracy. Monitor drivers to ensure they are installed correctly would ensure the device functions properly after updating, thus making it less like for the system to crash or function incorrectly upon software update. The applicants have only combined commonly known techniques in the field to achieve predictable results.

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over White modified Sutoh as applied to claim 21 above, further in view of Fukuda.

As per claim 23,

White modified by Sutoh teaches the arrangement according to claim 21 above,

White modified by Sutoh did not expressly teach:

- Characterized in that the driver installation module is formed with an auto-repair routine which may be triggered by the fault monitoring functionality for the repair installation of a device driver concerned.

However, Fukuda teaches:

- Characterized in that the driver installation module is formed with an auto-repair routine which may be triggered by the fault monitoring functionality for the repair installation of a device driver concerned. (Fukuda col 1, line 18, "According to the error control method based on the automatic repeat request system, if a data frame transmitted from a transmission side to a reception side contains an error, the data frame is again transmitted from the transmission side to the reception side on the basis of the repeat request issued from the reception side to the transmission side.")

It would have been obvious for one of ordinary skill in the art at the time of invention to incorporate the teaching of Fukuda into that of White modified by Sutoh in order to have modules formed for fault recognition and auto repair by transmit the data again. This is

method is commonly used in the error control in communication called automatic repeat request as demonstrated by the background of Fukuda reference, repeatedly transmit the data to the intended target would ensure the right data get transmitted to the said target. The applicants have only combined commonly known techniques in the field to achieve predictable results.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SWIFT whose telephone number is (571)270-7756. The examiner can normally be reached on Monday through Friday, 8:30AM to 6:00PM, alternate Fridays, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on (571)272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHARLES SWIFT/
Examiner, Art Unit 2191

/Wei Y Zhen/
Supervisory Patent Examiner, Art Unit 2191